

Committee on Resources,

Subcommittee on Fisheries Conservation, Wildlife & Oceans

[fisheries](#) - - Rep. Wayne Gilchrest, Chairman

U.S. House of Representatives, Washington, D.C. 20515-6232 - - (202) 226-0200

Witness Statement

TESTIMONY OF JEFFREY P. HIGH
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BEFORE THE
SUBCOMMITTEE ON FISHERIES CONSERVATION, WILDLIFE AND OCEANS
COMMITTEE ON RESOURCES
U.S. HOUSE OF REPRESENTATIVES
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Thank you, Mr. Chairman and distinguished members of the Subcommittee for the opportunity to appear before you today to testify on how NOAA's hydrographic services program fits into the larger Marine Transportation System initiative and let you know how important modernization of the Federal government's navigation services program is to the Coast Guard and to the nation.

I also want to thank you, Mr. Chairman, for your continuing leadership in recognizing the importance of the Marine Transportation System not only today, but in earlier hearings you held. We also appreciate your role in directing the Secretary of Transportation to establish a Task Force to assess the adequacy of the nation's marine transportation system to operate in a safe, efficient, secure, and environmentally responsible manner. This mandate, which was part of the Coast Guard Authorization Act for FY 1998, resulted in the September 1999 Report to Congress *An Assessment of the U.S. Marine Transportation System*, which Mr. Gudes mentioned in his remarks.

The Marine Transportation System Initiative is the basis for many interagency efforts. This is particularly evident in the Coast Guard's working relationship with NOAA. The Coast Guard's long established partnership with NOAA includes the exchange of navigation and environmental information and services that are used every day in the marine industry and in the course of Coast Guard operations. NOAA's navigation products have always been essential to the execution of Coast Guard missions such as search and rescue and oil spill recovery. Of critical importance to the Coast Guard is our mutual goal of navigation safety for boating and commercial shipping, a goal that is also shared by the marine industry, marine transportation system stakeholders, and other Federal and State government agencies who use, or share responsibility for some aspect of the marine transportation system. Safer navigation not only mitigates the loss of life and property and promotes a cleaner environment, but also supports the uninterrupted transport by water of the consumer goods that American's use in their daily lives.

The demand for commercial use of our ports and waterways continues to grow, fueled by increases in world trade and domestic use of the waterways to transport goods and people. Competition between commercial and recreational users for water space is also increasing. The types of vessels that call on our ports are changing. We are seeing larger freight ships and higher speed ferries, and high-speed personal watercraft that swell the recreational boating population. Increased use, coupled with increased speed and size, narrows the acceptable risk margin associated with marine transportation.

What are the gaps and how should we close them? Professional mariners require timely and accurate information about their operating environment. The time-sensitive operating practices of modern shipping require unrestricted access to the waterway and confidence in the channel dimensions and the depiction of those dimensions. Meeting these demands requires precision navigation services and systems, reliable hydrographic surveys, and real time information on weather, water levels, and maneuvering clearances, all services that NOAA provides under the Hydrographic Services Improvement Act. These services are critical to achieving the vision of a U.S. Marine Transportation System that will be the world's most technologically advanced, safe, secure, efficient, effective, accessible, globally competitive, dynamic and environmentally responsible system for moving goods and people.

The tools we use to do our business have changed. Safety initiatives now involve information systems and position fixing systems to display cartographic, navigational, and environmental information in near real time. Navigational charts are dynamic, and require frequent updating in response to shoaling, dredging, construction and the related changes to buoys and other aids to navigation. The Coast Guard, NOAA, National Imagery and Mapping Agency and the U.S. Army Corps of Engineers each have data critical to the safety of navigation. The Coast Guard is a direct partner with NOAA in the production and delivery of navigation products. Some of these activities include:

- Since the earliest days of the Republic, buoys and lighthouses have contributed to the safety of navigation. Although sophisticated electronic navigation systems have been introduced in recent years, physical aids remain critical to managing transit risk. The Coast Guard must continue to deliver this important service, and we must provide it at the highest levels of quality and reliability. We must also continue to cooperate with our colleagues at NOAA and the National Ocean Service to ensure that information on our constellation of short range aids to navigation is accurately presented to the mariner. Hydrographic survey data is linked with aids to navigation data on navigation charts. Both data sets are essential to safe navigation. An interagency information technology solution is needed to ensure the seamless exchange and management of the data required to produce navigation information products. The Coast Guard and NOAA are part of an interagency committee that is managing the evolution of electronic navigation technology. Several work groups are looking specifically at the digital data exchange question. Resolving electronic chart data issues in an important joint project that has international and industry implications.
- Technology has been used to reduce the staffing of vessels to make marine transportation economically feasible for a wide range of industry practices - including ferry and cargo operations. Electronic Navigational Chart (ENC) data is the core element of a modern integrated navigation information system. ENC based systems can improve safety in waterways because they present mariners with real-time information quickly and with minimal effort. An accurate, timely position based on Differential Global Positioning System (GPS) information, when presented on an electronic chart, provides mariners with the positioning accuracy they need to support navigation decisions. The Coast Guard and NOAA have entered into a formal agreement with respect to data sharing to support production of ENCs. The faster updated electronic navigational charts can be delivered to the mariner, the faster we can benefit from the safety advantage they bring. The Coast Guard agrees with NOAA that we need to accelerate the production of electronic navigation charts and will continue to work closely with them to speed this delivery.
- Automatic Identification Systems (AIS) is a new communication tool that has tremendous possibilities for managing risks associated with marine transportation. A vessel's AIS consists of a transponder that continuously broadcasts pertinent navigation data, including vessel identification, position, course, speed,

and cargo type. However, AIS is dependent on the availability of precise navigation systems that accurately depict the ship's operating environment. Continued support of the Differential GPS network and the rapid delivery of accurate electronic navigational charts are essential to the success of AIS.

- AIS can also deliver highly accurate information from many sources, such as the weather and hydrographic information provided by NOAA's Physical Oceanographic Real Time System (PORTS). The Coast Guard and NOAA have continued to cooperate on the installation and operation of PORTS in some of our nation's busiest waterways. Mariner reliance on the system is increasing. The Coast Guard strongly supports the expansion of the system and NOAA's quality control oversight of PORTS.

Summary

The Marine Transportation System Initiative provides a structure for all MTS users and stakeholders to work together to ensure that the system will be safe, secure, efficient, and environmentally responsible for the full range of users in light of the projected increase in demand. Initiatives that contribute to port and marine transportation safety are in the national interest and the services that NOAA provides are critical. The Coast Guard is committed to ensuring that vessel traffic will continue to move on the Nation's waterways safely and efficiently, including the Great Lakes-St. Lawrence Seaway in coordination with the Saint Lawrence Seaway Development Corporation. Modernization of the Federal government's navigation service program, in particular NOAA's navigation products is essential to meeting that objective. Although the Coast Guard has a significant role in ensuring port safety and efficient marine transportation, our ability to meet these responsibilities is dependent upon the ability of our Federal partners to accomplish their missions.

Thank you for the opportunity to discuss this important issue today. I will be happy to answer any questions you may have.

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